



## Stormwater Management Advisory Commission

### Meeting Minutes

October 3, 2019

3:00 pm

Conference Room 305  
Raleigh Municipal Building

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**Commission Members Present:** Matthew Starr, Claudia Graham, David Markwood, Tappan Vickery, Mark Senior, Evan Kane and Jermonde Taylor

**Staff Members Present:** Wayne Miles, Suzette Mitchell, Kelly Daniel, Scott Smith, Dan Clinton, Justin Harcum, Blake Haley, Reid Huntley, Amy Farinelli, Joyce Gaffney, Scott Bryant, Michelle Sclafani, Veronica Barrett, Heather Dutra, Barbara Moranta, Kevin Boyer and Ben Brown

**Commission Members Absent:** Ken Carper and David Webb

**Guests:** LouAnn Buck, Jeff Rowles, James Kutizer, Jennifer Mitchell, Dave Writen, Emily Rothrock, Simon Gregg, Henry Ward, Marsha Presnell Jeanette, Jeffrey Crump, Stephanie Hanes, Kristen Naroli, Trevor Clements, R. Wingate and P. Benheser

**Meeting called to order:** 3:00 pm by Matthew Starr (*chair*)

**1. Welcome, Introductions, Excused and Unexcused Absence**

- **Mr. Senior** made a motion to excuse Ken Carper and David Webb from today's meeting and Mr. Page seconded. The motion was passed unanimously.

**2. August 1, 2019 Minutes for Approval**

- Mr. Webb made a motion to approve and Mr. Page seconded. The motion was passed unanimously.

**3. Stormwater Staff Report (*New Hires*)**

Water Quality – *Joyce Gaffney as Environmental Specialist*

Drainage Assistance – *Daniel Clinton as Senior Engineer*

CIP – *Blake Haley and Reid Huntley as Senior Engineering Inspectors*

- **Hot Topics**

- *Flood Prone Area Stakeholder's Group Update* – *The last meeting was held in September. The group is putting together a memo summarizing the recommendations and staff will finalized it and bring at next SMAC meeting. The group is supportive of: an approach to restrict new development in the floodplain; no new development in the floodway fringe, a 100-year dry access for public roads in new development, and they will bring back a*



- recommendation that the city look at increasing hazard mitigation funding for buyout programs.*
- *UDO Text Changes (grading permit to violators) – Council authorized text change to Planning Commission, they made one modification, saying if you have two or more NOV's in a two-year period you are subject to get a land disturbance permit. Council agreed, and it became effective on Sept 23<sup>rd</sup>.*
  - *FY21 Budget Process – The kickoff meeting for CIP was held on October 3<sup>rd</sup>. Staff anticipates bringing information to SMAC within the next two meetings and would like input from the Commission. The draft is due on December 4<sup>th</sup>.*
  - *Flood Education Series at NC Science Museum – The second annual series was held on Thursday, September 12<sup>th</sup>. All were able to preview a documentary that WRAL produced on Hurricane Florence. We had safety and panel discussions with WRAL, State Floodplain Manager and Raleigh Fire Department. Staff hopes to continue the relationship with Museum of Science and have the education series in August next year.*
  - *Stormwater Design Manual rewrite sessions – Last week had informational session series for new stormwater manual. It was a two-night series with second night concentrating more on the technical side. There is a survey out for the manual, which will remain open until Oct 15<sup>th</sup>.*
  - *Rain Barrel update – Quarterly information is included in agenda packet and continue to do well in sales from city website.*
  - *Rainwater Rewards quarterly update:*
    - *Staff approved – 1*
    - *Projects closed out – 3*
    - *Permeable Paver Education Video viewed (Mitch Woodworth- Cooperative Extension NCSU)*

#### **4. Raleigh Rainwater Reward Projects**

**Justin Harcum** informed the Commission there are three projects up for review.

**509 Robin Hood Drive Project** – The property owner has requested funding assistance to install 277 square feet of rain garden to treat 1,332 square feet of impervious roof surface on her property. This project is in the Pigeon House Branch watershed and is eligible for a 90% reimbursement. The total project acceptable cost estimate is \$5,000, with the petitioner's share being \$500 and the City Stormwater share up to \$4,500. The project was started in July 2019 prior to approval and was completed in August 2019.

#### **Motion:**

**Mr. Starr** made a motion to approve and **Mr. Senior** seconded. The motion was approved unanimously.

**1211 Westview Lane** - Parkridge Lane Condominium Homeowners Association, Inc. has applied for funding assistance to install 1,656 square feet of raingarden to treat 8,820 square feet of impervious roof surface on their property. This project is in the Pigeon House Branch watershed and is eligible for a 90% reimbursement. The total project acceptable cost estimate is \$47,070, with the petitioner's share being \$4,707 and the City Stormwater share up to \$42,363.



**Questions\Comments:**

**Ms. Vickery** asked is the HOA in good standing since it will be a lot of maintenance. **Justin Harcum** said they have an active property manager and they understand the maintenance is long term. They already have contracted a landscaper and their contract will expand to include these features.

**Mr. Starr** asked if they considered having a BMP like a cistern. **Justin Harcum** said staff has met with the property managers and design engineers in discussing other projects, but their mind was settled on the rain garden concept.

**Ms. Graham** wanted to know what caused the initial problem. **Justin Harcum** has had flooding issues cause by runoff of the impervious surface tight spaces. **Ms. Graham** asked if he's looking at some of the root causes and perhaps characterizing them for some further analysis to incorporate in the policy going forward. **Justin Harcum** mentioned that he will be meeting next week with Information Technology in coming up with a platform for better tracking purposes.

**Mr. Senior** voiced concerns about the \$2,000 for utility location but he knows there's no way around it, if they are going to design they must know where it is. **Justin Harcum** agreed and the way he understood is they will engage a contractor that specializes in mapping utilities.

**Mr. Starr** is concerned about the tightness of the conveyance and the amount of impervious they are going to be treating. We are spending \$10,000 to \$11,000 on rain gardens and they are going to get blown out easily, it's just unfortunate a raingarden is being used instead of a capture device.

**Mr. Page** asked what happens if it gets more expensive after the utility relocation or maybe tree removal issue. **Justin Harcum** said they would be approved based on this, whether they go over or under. A bid could come under what they cost estimated and that would dictate what they are reimbursed. If they go beyond this they have the option to come out of pocket and move forward, or they would have to bring it back before SMAC and go to Council.

**3600 N Dawson Street Project** – Dawson Lane, LLC has applied for funding assistance to install a 7,953-gallon cistern to treat 8,655 square feet of roof surface and removal of 451 square feet of impervious parking lot on their property. This project is in the Pigeon House Branch watershed and is eligible for a 90% reimbursement. The total project acceptable cost estimate is \$78,662, with the petitioner's share being \$7,866 and the City Stormwater share up to \$70,796

**Questions\Comments:**

**Rev. Taylor** asked to be reminded on what dictates the 90% and 75% percentage. **Justin Harcum** said there are five areas in the city eligible for 90%. Their areas has been identified as impaired watersheds targeted by the program. He said they are four true watershed areas and what was historically used by Planning as an urban overlay district (*highly urbanized as a lot of impervious surface*) that was overlaid on top of partially pigeon house branch to make a larger downtown area that will be eligible.



**Motion:**

**Mr. Starr** made a motion that both projects (*Westview Lane & N Dawson St*) be approved and sent to City Council for final approval, seconded by **Ms. Graham**, **Mr. Senior** and **Mr. Page**. The motion was approved unanimously.

**5. Drainage Assistance Project Reviews**

**Dale Hyatt** informed the Commission there are two projects for review.

**904 Wakestone Court Drainage Improvements** - The existing 60-inch RCP driveway crossing at 904 Wakestone Ct, has separated joints resulting in heaving of the downstream brick headwall. Voids and roots are visible through the separated pipe joints. Sinkholes are also present along the driveway overtop the culvert. This project will replace the 60-inch RCP crossing and brick headwalls with a 72-inch RCP crossing and concrete headwalls.

**Questions\Comments:**

**Mr. Senior** asked did staff look to preserve the pipe or was it undersized too much. **Dale Hyatt** said they may look too removing the last section of pipe, but their joint separation is throughout, but with the last section of pipe falling off and the headwall leaning forward they will have to remove that part of it.

**Mr. Starr** asked if staff spoke with the homeowner about having some buffer restoration in their backyard along Crabtree creek. **Dale Hyatt** said no, but they will discuss it with them.

**Motion:**

**Mr. Senior** made a motion to approve the project and **Mr. Kane** seconded. The motion was approved unanimously.

**1700 Block – Kayla Court Bank Stabilization** - Moderate erosion is within 10 feet of the structure at 1709 Kayla Court and more severe erosion is within 25 feet of the structure at 1721 Kayla Court. This project will provide bank stabilization and grade control at a couple locations along the stream from 1701 Kayla Court to 1723 Kayla Court. The Hunter's Creek Townhomes Homeowners Association will be partnering with the City for the repairs and funding is 50% of the construction.

**Questions\Comments:**

**Ms. Graham** referenced the drainage assistance spreadsheet asking if the next two or three projects on the list will be discussed the next time. **Dale Hyatt** answered not necessarily. If staff identifies higher priority projects between now and the next meeting there could be a different project in that scenario. He said depending on how many we may or may not identify, they may not be there. He went on to say that outside identifying any new higher priority projects, staff will expect to see those same projects.

**Ms. Vickery** asked how the scoring/ranking are determined. **Dale Hyatt** said we can bring the process of how we developed the project prioritization tool at a future meeting. **Mr. Kane** commented that he has seen rankings rise to three and fall. In the scoring he noticed a 1.4 spread between 1 and 20 on the list and he wonders if the tool has that level of precision in it to carry out to four significant digits. Another thing, the map that shows Kayla Court reflects that the complex



should not have been built close to the creek, but it highlights a distinction where it's clearly a public runoff issue that's causing the stream to erode in a way that is detrimental to the property. The prior project is not distinct in the current scoring ranking and is simply decay, possible maintenance, but to him that's an important distinction for future examination.

**Mr. Senior** agreed and said we need to revisit the ranking process to enter an element in there to address other issues.

**Motion:**

**Ms. Vickery** made a motion to approve the project and **Mr. Kane** seconded. The motion was approved unanimously.

<i>Estimated Project Costs</i>	
904 Wakestone Court Drainage Improvements	\$106,600
1301 Battery Dr & 1308 Poole Rd Drainage Improvements	\$60,000
FY20 Budget	\$1,500,000
FY20 Projects Fund Approved to Date	\$531,000
Total Estimated Projects this Period	\$166,000
2100 & 2104 Hillock Drive Property Acquisition	\$245,000
<b><i>FY20 Remaining DA Funds</i></b>	<b><i>\$558,000</i></b>

**6. Plan for Advancing the Use of Green Stormwater Infrastructure (GSI)**

**Wayne Miles** provided a summary and Kevin Boyer read the additional direction that both Councilor Stephenson and Mayor McFarland's requested:

- *The plan be consistent with the City's existing legal authority*
- *The plan focus on developing strategies in enhancing the use of GSI and stakeholder be involved in the development of the plan*
- *Examine what other NC Municipalities have experience in enhancing GSI in their jurisdiction*
- *How low-impact GSI integrates with the City's current system (Mayor)*
- *Is a reduction in stormwater runoff and the plan's implementation cost justified? (Mayor)*

**Next Steps**

- *Ongoing City initiatives*
- *GSI policy for City projects*
- *When GSI is used*
- *If project is used by another city department would stormwater funding be used to encourage further use of GSI*
- *Consider reconvening a subcommittee*

**Kevin Boyer** indicated he would like to come back at the November meeting and do a presentation along with Trevor Clements to give you background on what we have done over the years. We will provide recommendations on the Council's request for the Commission to continue working on the proposed plan for the program.



**Ms. Graham** asked for clarification on the Mayor's question for item #2. **Wayne Miles** believes from a private and city perspective looking at cost of stormwater green infrastructure and if or where it cost more than traditional storm infrastructure, what is the value we are getting as a community out of that additional investment. He believes the tool that is under development will be able to address that. **Kevin Boyer** stated that a new activity can be created for addressing this.

**Ms. Vickery** requested next meeting if staff can provide an history of the stakeholders that were previously involved to make sure we are getting all the people.

#### 7. **Annual Report/Work Plan Feedback**

**Wayne Miles** presented the draft on the FY19 annual report and FY20 work plans. He informed the Commission that he's planning to bring it to Council in November.

##### **FY19 Annual Report Comments:**

- *Show community outreach and involvement and rain barrels information.*
- *Flood plain regulations – online surveys provide, was mail notices and feedback provided too. Per Staff cards were mailed to those residents that were in the floodplain, which did have a survey. Commission requested this be included with the process.*
- *Continue to highlight the emergency replacements (i.e. Clark Ave and Newton Road Culverts) with higher costs for Council to see.*

##### **Motion:**

**Mr. Markwood** made a motion to approve the annual report, pending edits as discussed today, both **Ms. Vickery** and **Mr. Page** seconded. The motion was approved unanimously.

##### **FY2020 Workplan Comments:**

- *Staff added "review, development, and implementation of a Flood Early Warning System" on item 4c*

##### **Motion:**

**Mr. Senior** made a motion to approve and **Mr. Markwood** seconded. The motion was passed unanimously.

#### 8. **Public Comment**

Marsha Presnell Jeanette spoke on the maintenance of streams and culvert pipes. She doesn't believe most people know how to maintain a stream and the city has not initiated coming out and speaking with homeowners on what they're supposed to do to maintain streams and failing culvert pipes from adjoining properties. She states it's a lot to ask property owners to maintain this. The city has some responsibility and an expectation if they think the property owners are supposed to know what the rules and regulation are for the protection of streams. She's amazed there is not a historic way of the city gathering information about conditions of streams and culverts. It's not something talked about unless you show up for a meeting such as this. She believes this is something the Commission needs to consider



**9. Other Business**

*Ms. Graham asked about the number of Raleigh residents purchasing the rain barrel and the assumption they will be installing them. Amy Farinelli said she used to provide the breakdown of municipalities in a memo, which she could do; however, although they might have a Raleigh address it doesn't mean they are in the city limits.*

**Adjournment:**

**Mr. Page** made a motion to adjourn and **Ms. Graham** seconded. The motion was passed unanimously, and the meeting adjourned at 4:58 pm.

Suzette Mitchell